

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Bruce TOGNAZZINI

Serial No.: 09/153,230

Group Art Unit: 2774

Filed: September 15, 1998

Examiner: X. Wu

For: LINEAR TOUCH INPUT DEVICE



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THE COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, DC 20231

Dear Sir:

Transmitted herewith is an Amendment in the above identified application.

- ☒ No additional fee is required.
☐ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.
☐ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.
☒ Also attached: Associate Power of Attorney

The fee has been calculated as shown below:

	NO. OF CLAIMS	HIGHEST PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	FEE
Total Claims	4	4	0	\$18.00 =	\$0.00
Independent Claims	37	37	0	\$78.00 =	\$0.00
Multiple claims newly presented					\$0.00
Fee for extension of time					\$0.00
Total of Above Calculations					\$0.00

- ☐ Please charge my Deposit Account No. 500417 in the amount of \$0.00. An additional copy of this transmittal sheet is submitted herewith.
- ☒ The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 500417, including any filing fees under 37 CFR 1.16 for presentation of extra claims and any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

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Docket No.: 50253-148 (P1623C)

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REQUEST FOR RECONSIDERATION

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

This is in response to the Examiner's non-final Office Action of June 30, 1999.

Filed concurrently with this response is an Associate Power of Attorney.

Claims 1-2, 4-17 and 22-42 remain in the application. Claims 1-2, 4-17 and 22-42 stand rejected. The independent claims are 1, 7, 22 and 29.

Applicant respectfully requests reconsideration of the Examiner's rejections.

Rejection under Judicially Created Doctrine of Double Patenting

The Examiner rejected claim 37 and 40-41 under the judicially created doctrine of double patenting. Citing *In re Schneller*, 397 f.2d 350 (CCPA 1968), the Office Action asserts "the subject matter claimed in the instant application . . . is covered by the patent."

Applicant respectfully submits that this type of rejection is improper in the present application. In particular, the claims in the patent are to a method, while the rejected claims

in this application are to an apparatus (claim 37 is to a “keyboard” and claims 40-41 are to “an input device”). Therefore the claims of the instant application are not covered by the patent.

Applicant respectfully requests the Examiner reconsider and withdraw this rejection.

Rejections under 35 U.S.C. §102

The Examiner rejected claims 1-2, 4-5, 7-11, 35-36 and 38-39 under 35 U.S.C. §102(b) as being anticipated by Kawamoto, U.S. Patent 5,365,254 (Kawamoto).

Applicant’s invention is directed to an input device such as a keyboard that has a “touch input device providing input information corresponding to position and pressure (specification, page 1, lines 3-4). In the preferred embodiment, the touch input “is comprised of a strip of pressure sensitive material . . . to detect contact in only one direction,” (specification, page 2 line22 to page 3 line 1). An advantage of the preferred embodiment is that “it is easy to access and manipulate due to its predictable location and its compact and simple design,” (specification, page 3, lines 3-4). For example, a user can more simply and easily control position in one dimension than with a device varying over two dimensions. At the same time, the user can control the position with one finger. Also, by varying pressure with the same finger, other types of information can be input with the same finger.

In contrast, Kawamoto is directed to a graph display system. Kawamoto teaches a touch area on a display to indicate the position along an X axis where a trendgraph is centered. The item cited by the Examiner is the touch area 13. Kawatomo teaches that

“in a display screen 10 is a touch area 13 and the X coordinate of the touch position is detected” (Kawamoto, column 2, lines 52-54).

Applicant respectfully submits that Kawamoto teaches detecting position but does not teach or suggest measuring the amount of pressure applied by the user at the position.

Furthermore, Kawamoto teaches that the touch area is on a display not on a keyboard. To modify Kawamoto to place the touch sensitive area on a keyboard would defeat the purpose of Kawamoto. This is because Kawamoto associates a position of the X-axis on the displayed graph with the part of the touch area that is touched. As stated in Kawamoto, “Touch area 13 consists of 15 touch zones along axis X.” Since axis X is on the display, the touch zones can not be placed along the axis X if the touch zones and touch area are on a keyboard instead of on the display. Also, Kawamoto states, “[i]nitially, cursor 12 is displayed at the top of the display area 11 . . . [and] can be moved to a touch zone by touching touch area 13,” (Kawamoto, column 2, lines 63-66). A cursor on a display can not be moved to a touch zone that is on a keyboard. Therefore Kawamoto does not teach or suggest a touch area on a keyboard.

Independent input device claim 1 recites “position and pressure value . . . into a data signal” which is not shown by Kawamoto. As stated above, Kawamoto teaches position but not a separate value for pressure, as required by claim 1. Thus Kawamoto does not teach or suggest a substantial limitation of Applicant’s claim 1, and a rejection under 35 U.S.C. §102(b) is improper. For at least the same reasons, the rejection is improper for claims 2, 4-6 and 38-42 which depend, directly or indirectly, on claim 1. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 1-2, 4-5 and 38-39.

Independent keyboard claim 7 recites a “keyboard” which is not taught or suggested by Kawamoto for the reasons given above. Thus Kawamoto does not teach or suggest a substantial limitation of Applicant’s claim 7, and a rejection under 35 U.S.C. §102(b) is improper. For at least the same reasons, the rejection is improper for claims 8-17 and 35-37 which depend, directly or indirectly, on claim 7. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 7-11 and 35-36.

Rejections under 35 U.S.C. §103

The Examiner rejected claims 6, 12-17, 22-26, 28-33 and 42 under 35 U.S.C. §103(a) as being unpatentable over Kawamoto in view of Bequaert et al., U.S. Patent 4,042,777 (Bequaert).

As argued above, Kawamoto does not teach or suggest pressure separate from position provided to a data signal; and Kawamoto does not teach or suggest a keyboard.

Bequaert is directed to a keyboard with keys that can be pressed simultaneously. “The operator presses several keys at once” (Bequaert, Abstract). The key combinations indicated “strings of characters,” (Bequaert, Abstract).

Applicant respectfully submits that Bequaert does not disclose or suggest a touch sensitive strip that detects position, or a separate measurement of the amount of pressure at the point of touch. Thus Bequaert does not cure the deficiencies of Kawamoto.

Applicant respectfully submits that the combination does not teach a touch strip with both a pressure signal and a position detector, as required by independent input device claim 1. Thus Kawamoto does not teach or suggest a substantial limitation of Applicant’s claim 1, and a rejection under 35 U.S.C. §103(a) is improper.

Furthermore, the combination is not proper. Bequaert is directed to a keyboard. Kawamoto is directed to a display device that will not function if the touch area is moved to keyboard, for the reasons given above. One of ordinary skill in the art would not be motivated to modify Kawamoto by moving the touch area to the keyboard. The suggested modification would defeat the purpose and change the principle of operation of Kawamoto to display a graph with a touch zone associated directly with the X-axis of the graph on the display.

The Office Action states that “Bequaert is cited to teach the touch input device can be integrated with keyboard for inputting characters . . . so that the user can do both cursor control and inputting characters.” Such a combination is not motivated by these references, because the prior art does not suggest the desirability of this combination. Kawamoto teaches away from moving the touch strip to a keyboard and the Office Action does not show where Bequaert suggests the thumb keys should be replaced with a touch strip for cursor control. On the contrary, the eight states of the four thumb keys of Bequaert are necessary because “the thumb keys select the alphabet/-case, output order of characters . . . a space character . . . and capitalizing” (Bequaert, Abstract). The Office Action does not show where Bequaert suggests that these necessary keys can be replaced with a cursor control of any sort. Thus the stated reason does not provide proper motivation to combine these references.

It appears that the only reason to combine these references is to produce Applicant’s invention, which is impermissible hindsight.

Because the combination is not proper, and does not teach both a position and a pressure as required by independent input device claim 1, for the reasons given above, a

rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 2, 4-6 and 38-42 which depend, directly or indirectly, on claim 1. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 6 and 42.

Because the combination is not proper, and does not teach a keyboard with a linear touch input device as required by independent keyboard claim 7, for the reasons given above, a rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 8-17 which depend, directly or indirectly, on claim 7. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 12-17.

Because the combination is not proper, and does not teach a “a linear touch input device . . . integrated with said keyboard” as required by independent computer system claim 22, for reasons given above, a rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 23-28 which depend, directly or indirectly, on claim 22. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 22-26 and 28.

Because the combination is not proper, and does not teach a “a linear touch input device . . . integrated with said keyboard” as required by claim 29, for reasons given above, a rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 30-34 which depend, directly or indirectly, on claim 29. Applicant respectfully requests the Examiner reconsider the rejection with respect to claims 29-33.

The Examiner rejected claims 27 and 34 under 35 U.S.C. §103(a) as being unpatentable over Kawamoto in view of Bequaert and further in view of Smith et al., U.S. Patent 5,111,005 (Smith).

Smith is directed to a hand held digitizing pointer (a puck) having “two additional buttons 17 and 18 labelled UP and DN (abbreviation for DOWN)” (Smith, column 4, lines 38-40). Smith teaches, “when one of the added buttons 17 or 18 is pressed [, the] output . . . includes signals representing the Z-axis signals,” (Smith, column 4, lines 55-58).

Applicants respectfully submit that Smith does not teach or suggest a linear touch strip, or one integrated on a keyboard, or a linear position and pressure detector. Thus Smith does not cure the deficiencies in the other references.

Neither does Smith provide a reason to combine these references. The Office Action states it would be obvious “to have modified Kawamoto . . . with . . . multi-dimensional input . . . so that the user can use the pointing device in a three-dimensional display” (Office Action, pages 5-6). However, neither Kawamoto nor Bequaert mention a need for three dimensional pointing. Kawamoto specifically is confined to a two - dimensional graph on a two dimensional display. Bequaert does not mention graphs at all and is non-analogous art for graphing in two or three dimensions. Thus the references do not suggest the combination or the modification suggested by the Office Action, and the combination is improper.

It appears that the only reason to combine these references is to produce Applicant’s invention, which is impermissible hindsight.

Because the combination is improper and does not teach “a linear touch input device . . . integrated with said keyboard” as required by independent computer system

claim 22, for reasons given above, the Office Action does not make a prima facie case of obviousness and a rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 23-28 which depend, directly or indirectly, on claim 22. Applicant respectfully requests the Examiner reconsider the rejection with respect to claim 27.

Because the combination is not proper, and does not teach a “a linear touch input device . . . integrated with said keyboard” as required by claim 29, for reasons given above, the Office Action does not make a prima facie case of obviousness and a rejection under 35 U.S.C. §103(a) is improper. For at least the same reasons, the rejection is improper for claims 30-34 which depend, directly or indirectly, on claim 29. Applicant respectfully requests the Examiner reconsider the rejection with respect to claim 34.

Conclusion

For the reasons given, Applicant believes that the application is in condition for allowance and the Applicant requests that the Examiner give the application favorable consideration and permit it to issue as a patent.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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